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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,581	03/23/2004	Steven S. Kim	82,795	4120

7590 02/26/2007
Office of Counsel Code OC4
Naval Surface Warfare Center
Indian Head Division
101 Strauss Ave., Bldg. D-31
Indian Head, MD 20640-5035

EXAMINER

CLEMENT, MICHELLE RENEE

ART UNIT	PAPER NUMBER
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3641

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/807,581

Applicant(s)

KIM ET AL.

Examiner

Michelle (Shelley) Clement

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-12,14-17 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-12,14-17 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

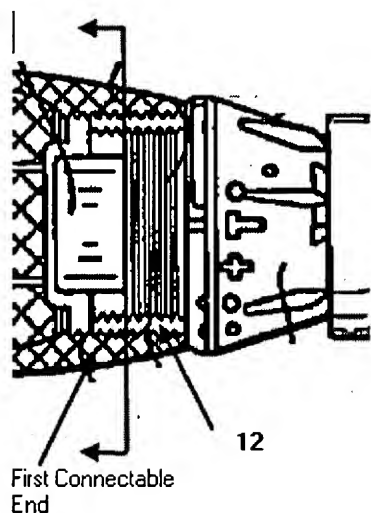
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed 11/22/06 have been fully considered but they are not persuasive. With regards to Wong et al. it is noted that applicant argues for a narrower interpretation than the claims actually read. The amended claim states "wherein a portion of the second mating surface extends beyond the first *connectable end* in contact with the second rocket fuze section". Applicant asserts that this should be interpreted to mean that a portion of the second mating surface must extend beyond the first rocket *section* or beyond the rocket warhead, however this is not what the claims recite. While applicant is correct in stating that the adapter of Wong et al. (reference 12) is located within a front portion of the projectile body, it is noted that the claims do not require the adapter to extend beyond the projectile body but merely to extend beyond the first connectable end. It is the examiner's position that the *first connectable end* of the first rocket section is located within the front portion of the projectile body near a position indicated below at a position of the arrows. From the figures it is clear that a portion of the second mating surface (of the adapter) extends **beyond** the *first connectable end* in contact with the second rocket fuze section.



The remainder of applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection as necessitated by applicant's amendments.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-3, 5, 7-12, 14-17, and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 24 recite the limitation "a **second** rocket **fuze** section" but the claims have not recited a **first** rocket **fuze** section. It is not clear whether applicant intends two rocket fuze sections or if the fuze is the second section of the rocket.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

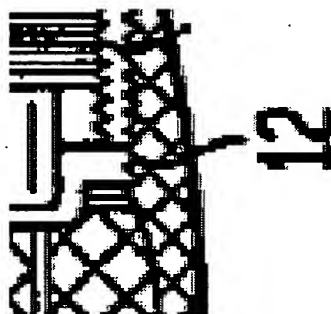
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 7, 8, 11, 12, 14-16, 21, 22, and 24-26 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wong et al. (US Patent # 7,025,000). Wong et al. discloses an ordnance venting system to reduce the danger of explosion from heat induced over pressurization in rocket warheads comprising a first rocket section comprising a warhead section having a first connectable end and an adapter for melting at high temperatures having a first mating surface and a second mating surface, the first mating surface of the adapter effective to rigidly connect to the first connectable end of the rocket warhead section and the second mating surface of the adapter effective to rigidly connect with a connectable end of a second rocket section wherein the adapter binds the first rocket section and second fuze rocket section, and wherein a portion of the second mating surface extends beyond the first connectable end in contact with the second rocket fuze section. The rocket warhead section comprises a single compartment explosive fill. Wherein the second rocket section comprises a rocket fuze section. The adapter is comprised of a nylon material. Wong et al. discloses a rocket comprising the venting system, wherein the rocket is one of an unguided rocket warhead and a guided rocket warhead and the adapter melts at a temperature from at least about 350oF. The first mating surface comprises a portion substantially perpendicular to the first connectable end and an external portion in relation to the first mating end. The adapter comprises an external surface portion (the adapter has an external surface (reference 210)) that contacts the first connectable end and the second rocket fuze

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section. The external surface portion is situated substantially intermediate the first connectable end and a portion of the second rocket fuze section. The adapter is made of a plastic material preferably of Formion F1-120 plastic, which is a nylon thermoplastic polycarbonate material that meets current munition safety standards. Figure 2 appears to show that the first mating surface of the adapter has an L-shaped portion.



Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 5, 9, 10, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. as applied to claim 1 above. Wong et al. discloses the claimed invention except for expressly disclosing the exact tetrafluoroethylene material, the warhead comprising multiple submunitions and multiple adapters. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize tetrafluorethylene, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its

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suitability for the intended use as a matter of obvious design choice and Wong et al. discloses the desirability of meeting current munition standards. *In re Leshin*, 125 USPQ 416. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include multiple adapters as well as multiple submunitions, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art and adding an additional adapter would merely increase the safety factor of the device. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

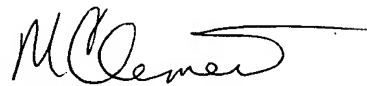
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Clement whose telephone number is 571.272.6884. The examiner can normally be reached on Monday thru Thursday 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571.272.6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


MICHELLE CLEMENT
PRIMARY EXAMINER